

REMARKS

The Examiner's attention to this application is sincerely appreciated.

The Title and Specification have been amended per the suggestions of the Examiner.

Applicant has canceled Claims 1 and 2, has amended Claim 3, and has inserted new Claims 4 to 14.

The formal drawings are submitted herewith.

The Problem

Prior to the invention, a method for efficiently polishing an aggregate coating on the wall of a swimming pool apparently did not exist. Attempting to polish an aggregate swimming pool coating with a conventional sanding or grinding disk was not feasible because:

1. The aggregate in a swimming pool coating rapidly cuts, damages or tears conventional sanding or grinding disks,

1 2. Conventional sanding disks are capable of only gradually polishing
2 aggregate particles, which particles can be quite hard, or
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4 3. Pressing conventional sanding disks against the aggregate coating normally
5 causes aggregate particles to be torn or ripped from the coating, damaging
6 the coating.
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9 The Invention
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11 Applicant provides an improved method for polishing a swimming pool coating that
12 includes aggregate.
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15 In particular, Applicant's improved method utilizes:
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17 1. A polishing apparatus that can readily polish hard aggregate particles, and,
18 if desired, can polish the particles until they are flush with a smooth
19 swimming pool surface.
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21 a. The heat generated by this kind of polishing apparatus normally
22 requires the apparatus to be cooled by water that is directed through
23 the head under pressure and between the polishing apparatus and
24 pool surface being polished. **Fig. 4, arrows B and C; Specification,**
25 **p. 5, lines 18 to 20.**

26 b. The polishing apparatus includes hard particles securely embedded
27 in a material like rubber or metal. Specification, p: 5, line 10.
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1 c. The polishing apparatus normally includes radially extending grooves
2 that facilitate the penetration of cooling water between the polishing
3 apparatus and the swimming pool surface that is being polished. **Fig.**
4 **3; Specification, p. 5, lines 6 to 9.**

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7 2. A special cement plaster slurry composition is utilized to withstand the forces
8 generated by the polishing apparatus when the dried slurry composition is
9 being polished. This slurry composition preferably includes a silica filler,
10 liquid acrylic bonding agent, and/or plastic fibers. **Specification, pp. 6 to 8.**

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13 The Prior Art

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15 The prior art of record does not appear to disclose the novel features of the
16 invention as now set forth in the amended Claims.

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18 The sanding and grinding disks in the polishing apparatus disclosed in the *Torrance-*
19 *Castanza et al.* (U.S. 6,203,415) and *Torrance et al.* (5,620,364) references would, in
20 Applicant's opinion, be readily damaged and shredded if used to polish an aggregate
21 swimming pool surface, particularly if pressure is applied in an attempt to polish aggregate
22 flush with a pool surface. This prior art polishing apparatus also is not properly configured
23 for water cooling:
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27 1. Relying on the water in a swimming pool to cool the polishing apparatus--
28 pool surface interface ordinarily is not, in Applicant's opinion, sufficient

1 because the water can not readily penetrate between the polishing apparatus
2 and the pool surface that is being polished. It also is unlikely that the
3 *Torrance et al.* apparatus would be used to polish an entire pool surface
4 when a swimming pool is filled with water because of the pressure that has
5 to be applied to the polishing head and because workers would have either
6 to wear diving suits or erect a crane or lever mechanism that moves the
7 polishing head over the entire pool surface. These procedures are not
8 economically feasible.
9

- 10
11 2. Pressurized water directed through the polishing head and through grooves
12 radially formed in the polishing head is typically necessary to properly cool
13 the interface between the polishing apparatus and swimming pool surface
14 that is being polished. Such grooves do not appear to be utilized in the
15 *Torrance et al.* polishing equipment.
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18 Further, the abrading particles in the disks disclosed in the *Torrance et al.*
19 references do not appear to be set securely in rubber, metal, or some other strong
20 material.
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23 The *Yon* (U.S. 5,650,004) and *Murray* (U.S. 4,398,960) references do not disclose
24 Applicant's particular cement plaster slurry composition including a liquid bonding agent
25 and plastic fibers.
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1 The *Johnson et al.* reference (U.S. 4,428,775) discloses a cement sheet product
2 that includes plastic fibers. Applicant submits, however, that:

- 3
4 1. There likely are literally thousands of patents and other publications that
5 disclose the use of fibers in concrete, metal, and other materials.
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- 7
8 2. There apparently is not a **single** patent or publication that suggests:
9
 - 10 a. The use of fibers in the concrete coating on the wall of a swimming
11 pool.
12
 - 13 b. The use of plastic fibers **in combination** with a liquid bonding agent
14 and silica filler in a swimming pool wall coating.
15
 - 16 c. The use of plastic fibers in a **polishing process** for producing a
17 smooth aggregate wall surface in a swimming pool.
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19 Accordingly, Applicant respectfully submits that the invention as now set forth in the
20 amended Claims is not anticipated under 35 U.S.C. Section 102 or rendered obvious under
21 35 U.S.C. Section 103 by the references of record.

22 If the Examiner finds merit in the foregoing remarks and amendments, It is believed
23 the application is in condition for allowance, and such action is earnestly solicited.
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Respectfully submitted,



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